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1 MGS LFQEAEP QAGTEQNKPT LASRFQQT LG DLLARLGSRG HVYVIHCLNP  
51 TPGKIPGLLD VGHVAEQLRQ AGILEIIGTR STHFVVRVSE QVFLARFHAL  
101 GSGRQKAASD QERCGAILSE VLGAESPLYH LGVTQVLLQE QGWQQLEQLW  
151 AQRRSQALLT LHRGLRACIT RQRLRLLP RM QARVRGLQAR KRYLQRRSAL  
201 GQLNTILLVA RPLRLRRQKL RCAPGPHSGE PWGKVS NMDL GRLEIPAQLA  
251 TLLERAEGHQ ALLTGSITES LPPEVPARPS LTLPPDIDQF PFSSEFVSTSF  
301 QKPFLPRPGQ PLDEPLRLD GENPQQA LEI NRVMLRL LGE GSLQSWQEQT  
351 MGTFLVQQAQ RRPGLRDEL F SQLVAQLWRN PDEQQNQRGW ALMVILLSSF  
401 APTPALEKPL LKFVSDQAPS GMAALCQHKL LGALEQTFLA PMASRSHPTT  
451 QLEWKAGLRR GRMALDVFTF NEESYSAEVE SWTGGEQFAG WILQSRGLEA  
501 PPRGWSVSLH SGDAWRDLPG CDFVLDLIGQ TEDLGDPAGP HNYPIPLGL  
551 AESIPPAPGV QAPSLPPGLP PGPAPILASS RPPGEASKPE NLDGFVDHLE  
601 EPALAPGFSD LEQGWALSRR MKGGGSVGPT QQGYPMVYPG MVQAPSYQPA  
651 MIPAPMPVMP AMGAVPTMPA MMVPPQQPPL VPSLDSRQLA LQQQNFINQQ  
701 AMILAQQMTT QAMSLSLEQQ NQRHQHQAQT SGATSQPPPS TTAPKAKKEP  
751 APQEKPE SNL EPSGVGLRED TPEEAESKPQ REKSFQQRD YFQKMGQDPI  
801 RVKTVKPPAK VQIPQEEMEE TEEEDETA E LSPPPPPPPV YKKPLKASRP  
851 KAVKEDEAEP AQEEVPTQGE DPPVHSSNSA PQHPKPSRVP PVQSSNSAPP  
901 RPQPSREIRN IIRMYQSRPG PVAVPVQPTR PIKTFQKKND PKDEALAKLG  
951 INGVHLPLST SPNQGKSSPP AVVPRPKARP RLEPSLSIQE KQGPLRLD LG  
1001 PCSPNPPTAP APPPPPALPP PLSGEPKTPS VESHALTEPM EDKNISTKLL  
1051 VPSGSVCFSY ANAPWKFLR KEVFYPRENF SHPYCLSLLC QQILRDTFTE  
1101 SCTRISQDER HKMKGLLDL EVSLETLDIV EDSIKKRIVV AARDNWANYF

FIG. 1A.

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1151 SRIFPVSGES GSDVQLLGVS HRGLRLLKVT QSPSFHLDQL KTLCSYSYAE  
1201 VLTVQCRGRS TLELSLKNEQ LILHTAWARA IKAMVDLFLS ELRKDSGYVI  
1251 ALRSYITDDN SLLSFHRGDL IRLLPVTALE PGWQFGSAGG RSGLFPDDVV  
1301 QPAAAPDLSF SLGKRNSWQR KSKLGPAQEV RKTEEVK\*

*FIG. 1B.*

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1 CGCTGGGACT GTCACCTACC AGGTGCACAA GTTCATAAAC AGAAACAGGG  
51 GCCACCTGGA CCCCCTGTG CTGGAGATGC TCAGGCAGAG CCAGCTGCAG  
101 GTGACCTAGC CTTCTTTTCA GCTCATGGGC AGCCTGTTC AAGAAGCAGA  
151 GCCCCAGGCT GGGACTGAGC AAAACAAACC CACATTGGCC TCTCGATTCC  
201 AGCAGACCCT GGGTGACTTG CTAGCTCGGC TAGGCAGCAG GGGCCATGTC  
251 TACGTCATCC ACTGTCTCAA TCCCACCCCT GGAAAGATCC CAGGCCTCTT  
301 GGACGTGGGG CATGTGGCAG AGCAGCTGCG TCAGGCTGGC ATCCTGGAGA  
351 TCATAGGCAC CCGGAGTACC CACTTCCCCG TCGAGTGTC CTTCCAAGTC  
401 TTTCTGGCAA GGTTCATGC CCTGGGGTCA GGGAGACAGA AAGCTGCCTC  
451 TGACCAGGAG AGGTGTGGTG CCATCCTCAG TGAAGTGCTG GGGGCAGAGT  
501 CACCGCTGTA TCATCTTGGA GTCACCCAGG TCCTGCTGCA GGAACAGGGC  
551 TGGCAGCAGC TAGAACAGCT GTGGGCTCAG CGGCGCTCAC AGGCCCTGCT  
601 CACTCTGCAC CGTGGCCTCC GAGCCTGTAT CACCCGGCAG CGCCTCCGT  
651 TCCTGCCCCG GATGCAGGCT CGTGTGCGTG GGCTCCAGGC CAGGAAGCGA  
701 TATCTCCAGC GGAGGTCAGC TCTGGGACAG CTGAACACCA TTCTCCTAGT  
751 GGCCCGGCCC CTGCTCCGGA GACGACAGAA GCTACGGTGT GCCCCTGGCC  
801 CGCACAGCGG GGAGCCCTGG GGGAAAGTGT CAAATATGGA CCTGGGTGCG  
851 TTAGAGATCC CCGCCCAGCT GGCTACTCTG CTGGAGAGGG CGGAAGGCCA  
901 CCAGGCCTTG CTGACGGGGA GCATCACAGA GTCCCTGCCA CCTGAGGTCC  
951 CCGCCCGGCC CAGCCTGACT CTCCCTCCAG ACATTGACCA GTTTCCTTC  
1001 TCCAGTTTGT TATCCACCAG CTTTCAGAAG CCATTCTGC CTCGACCAGG  
1051 GCAGCCACTG GACGAGCCCC TGACGCGGTT AGATGGCGAG AACCCCTCAG

FIG. 2A.

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1101 AGGCTCTGGA GATCAACAGG GTGATGCTGC GGCTCCTGGG GGAAGGATCT  
1151 CTGCAGTCTT GGCAAGAGCA GACCATGGGC ACGTTCCTCG TGCAGCAGGC  
1201 CCAGCGACGG CCGGGACTCC GAGATGAGCT CTTACGCCAG CTGGTGGCCC  
1251 AGCTGTGGCG CAACCCAGAT GAGCAACAGA ATCAGCGTGG CTGGGCCCTA  
1301 ATGGTGATCC TGCTCAGCTC CTTTGCTCCC ACACCTGCCC TGGAGAAGCC  
1351 ACTGCTCAA TTTGTATCTG ACCAGGCTCC CAGTGGCATG GCAGCCCTGT  
1401 GCCAGCACAA GCTGTTAGGT GCCCTGGAGC AGACACCGCT GGCTCCCATG  
1451 GCTTCGAGGT CCCACCCACC CACACAATT GAGTGAAGG CTGGTTTACG  
1501 TCGGGGCCG ATGGCGCTGG ATGTGTTTAC ATTCAACGAG GAAAGCTACT  
1551 CCGCGGAAGT GGAATCCTGG ACCACGGGAG AGCAGTTTGC AGGGTGGATC  
1601 CTACAGAGCA GAGGCCTGGA GCGCCCCCT CGTGGCTGGT CTGTGTCACT  
1651 GCATTCTGGG GATGCTTGGC GTGACTTGCC TGCTGTGAC TTTGTGTTGG  
1701 ACCTAATAGG CCAGACTGAG GACTTGGGAG ACCCAGCTGG TCCCCACAAC  
1751 TACCCCATCA CTCCTCTTGG TTTAGCTGAG AGCATCCCTC CAGCCCCCTG  
1801 TGTCCAGGCT CCTTCCCTGC CCCCAGGACT CCCTCCAGGT CCAGCCCCAA  
1851 TACTGGCCAG CAGCCGCCCT CCGGGCGAGG CCAGTAAGCC TGAGAACCTG  
1901 GATGGTTTCG TGGACCACCT CTTTGAACCA GCGCTCGCTC CGGGTTTCAG  
1951 TGATCTGGAA CAAGGCTGGG CCCTGAGCAG ACGCATGAAG GGAGGGGGCT  
2001 CTGTTGGGCC CACCCAGCAG GGCTACCCCA TGGTGATACC AGGTATGGT  
2051 CAGGCACCTA GCTACCAGCC AGCTATGATA CCCGCACCGA TGCCCGTCAT  
2101 GCCAGCCATG GCGCAGTCC CAACCATGCC AGCCATGATG GTGCCACCCC  
2151 AGCCACAGCC TCTGGTGCCC AGTTTGGACT CAAGGCAGCT GGCACACAG  
2201 CAGCAAAACT TCATCAACCA GCAGGCGATG ATTCTGGCGC AGCAGATGAC  
2251 CACCCAGGCC ATGAGCCTGT CCCTGGAGCA GCAGAATCAG AGACACCAGC

FIG. 2B.

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2301 ACCAAGCTCA GACCTCTGGG GCCACCTCCC AGCCTCCACC CTCAACCACT  
2351 GCTCCCAAGG CCAAGAAGCC TCCTGCCCCC CAAGAGAAGC CAGAGAGTAA  
2401 CCTAGAGCCT TCGGGTGTG GCTTGAGAGA GGACACCCCA GAGGAAGCTG  
2451 AAAGCAAGCC TCAGCGCCCC AAGAGCTTCC AACAGAAACG GGACTATTTC  
2501 CAGAAGATGG GGCAAGATCC GATCAGAGTG AAGACGGTGA AACCTCCAGC  
2551 CAAGGTTCAG ATCCCCAAG AGGAGATGGA GGAGACGGAG GAGGAGGAGG  
2601 ATGAGACCGC CGAGTTGTCC CCTCCTCCTC CCCCTCCCCC GGTTGTGAAG  
2651 AAGCCGCTGA AGGCAAGCAG GCCCAAAGCC GTAAAGGAAG ATGAGGCAGA  
2701 GCCCGCCAG GAGGAAGTAC CGACCCAGGG CGAGGATCCC CCGGTGCACA  
2751 GCTCCAACTC CGCACCTCAG CACCCCAAAC CCAGCAGGT ACCCCCAGTG  
2801 CAGAGCTCCA ACTCCGCACC TCCACGCCCG CAACCCAGCA GGGAAATCCG  
2851 AAACATCATC CGAATGTACC AGAGCCGTCC AGGGCCTGTG GCTGTGCCCC  
2901 TACAACCCAC CAGGCCCATC AAAACTTTTC AGAAGAAAAA TGACCCTAAG  
2951 GATGAGGCTT TGGCTAAGTT AGGGATAAAT GGCCTCCACT TGCCCTATC  
3001 GACATCGCCT AACCAAGGGA AGAGCTCTCC ACCGGCTGTA GTTCCTCGAC  
3051 CTAAGGCTCG ACCTCGTCTT GAGCCTTCCC TATCCATCCA GGAAAAGCAG  
3101 GGACCCCTTC GGGACTTGTT TGGCCCATGT AGTCCAAACC CACCTACAGC  
3151 TCCAGCACCC CCGCCTCCAC CAGCACTCCC ACCGCCTCTG TCTGGGGAGC  
3201 CCAAGACCCC TTCAGTGGAG TCTCATGCCT TGACAGAGCC CATGGAGGAC  
3251 AAGAACATCT CCACAAAGCT CCTTGTGCCC TCTGGAAGTG TGTGCTTCTC  
3301 CTATGCCAAT GCACCCTGGA AGTTGTCTT ACGCAAGGAG GTGTTCTACC  
3351 CCCGGGAGAA CTTAGTTCAT CCATACTGCC TCAGTCTCCT CTGCCAGCAG  
3401 ATCCTGCGGG ACACCTTCAC AGAGTCCTGC ACCCGGATCT CACAGGATGA

FIG. 2C.

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3451 GCGGCACAAA ATGAAAGGCC TTCTGGGAGA CTTGGAGGTG AGTCTGGAGA  
3501 CCCTTGACAT TGTTGAAGAC AGCATCAAAA AACGCATCGT GGTGCGTGCT  
3551 CGGGACAACCT GGGCCAATTA CTTCTCCCGC ATCTTCCAG TCTCGGGTGA  
3601 GAGTGGCAGC GATGTACAGC TGCTGGGTGT GTCTACCCGG GGA CTGCGGC  
3651 TGCTGAAGGT GACCCAAAGC CCGAGCTTCC ACCTGGACCA GCTGAAGACA  
3701 CTCTGTTCTT ACAGCTATGC TGAAGTCCTG ACCGTGCAGT GCAGGGGCAG  
3751 ATCCACCCTG GAGCTGTCCT TGAAGAATGA GCAGTGATA CTGCACACAG  
3801 CCTGGGCGAG GGCCATCAAG GCCATGGTGG ATCTATTCTT GAGTGAACCT  
3851 AGGAAGGACT CCGGCTATGT CATCGCCCTG CGCAGCTACA TCACCGATGA  
3901 CAATAGCCTC CTCAGTTTCC ACCGTGGGGA CCTCATTAGG TTACTGCCAG  
3951 TGACCGCTCT GGAACCAGGC TGGCAGTTCG GTTCTGCCGG GGGCCGCTCC  
4001 GGA CTCTTTC CCGATGACGT GGTGCAGCCA GCTGCTGCC CCGACCTCTC  
4051 CTTTTCCCTG GGAAGAGAA ACAGCTGGCA ACGCAAGAGT AAGCTGGGGC  
4101 CAGCTCAGGA GGTGAGGAAG ACAGAAGAGG TGAAGTGATA CAGGCCATAAC  
4151 TTGGAGACTG AGAAGGAAAG AGCAGGGTTG CTTGGGTGT TGTCCACTTC  
4201 CTGTCCTGGT GGCCAGGGCT CAATGTGTTT CTGTCCTTTA CCATCTCCTG  
4251 ACTTTTTGCC ATTTGTGAGA CTGTAAGTCA CACCCTCTAA CTCTGGTACT  
4301 TAGTTCAGTG TCTCCATAGA GGATGCTTAA TAAATAACCT TGGTTTTCTT  
4351 GGTTCCTGGT GTCATCCTC TTGGGTCTAA TGGGTATGGG GACCAGGGCC  
4401 TGAGAGTGAG TATTGGGCCT CTGGGCTAGA TGGTGGGTAC TGGGTGGTA  
4451 CCAAATTTCC TGTGCTCCCA GCGCCCCACC CATCCAGGA AACAGAACC  
4501 CAGTGAAGAC TCGGAGGCCA CCTCCTTTAC AACCTACAGC TCTTTGTCTG  
4551 CCGACCCCCA CAACTACACC ATGCAGGAAT TTGCCCTGCG CTATTTCGG  
4601 AAGCCTCATA CCTGGCTGAC CCAGATGAGT AGAGACACCA AAGAGAAAGC

FIG. 2D.

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4651 TGCCATCAAC CTGATCCAGT AACTAAGGA CCCCATCCAG GAATCCCTTA  
4701 CCAGCTTCTG CAATGGGGAC ACAACAGTA AAGCTGTGGC TGGCTTCAAG  
4751 GCTCTGATGC AGTTTATGGG GGACCAGCCT AAGCCCCGGG GCAAGGACGA  
4801 GCTGAGTCTG CTCTATGAGC TGCTGAAGCT GTGCCAAGAT GACCTTAGGG  
4851 ACGAGATGTA CTGCCAGGTC ATCAAGCAAG TCACAGGACA CCCCCAGCCA  
4901 AAGCACTGTG CTCTGGGCTG GAGCGTCCTC AGCCTCTTCA CAGGCTTCTT  
4951 TGCACCATCG ACCAGCTGA TGCCCTATGT GACCAAGTTC CTGCAGGATT  
5001 CCAGCCCCAG TGAAGAGTTG GCCAGGAGGA GCCAGGAGAA CCTCCAGCGC  
5051 ACAGTTAAAT ATGGGGGACG CCAGCAGCTG CCGTTACCTG GTGAAATGAA  
5101 TGCTTTTCTG AAAGGGCAAG CAGTTCGTTT GCTTCTAATT CACCTGCCTG  
5151 GGGGTGTGGA CTACAGGACG AATTCACAGA CATTACAGT GGCAGGGGAA  
5201 GTGCTAGAGG AGCTGTGTGG ACAGATGGGC ATCACAGACT TGGAAGAAGT  
5251 GCAGGAATTT GCCCTCTTTC TCATCAAAGG AGAAGGTGAG CTGGTTCCGGC  
5301 CGCTGTCACC CCATGAGTAC ATCAACAATG TGGTGACGGA CCAGGACATG  
5351 AGCCTTCACA GCCGACGGCT TGGTTGGGAG ACTCCACTGC ATTTTGATCA  
5401 CTCCACCTAC ACGGAAACCC ACTATGGCCA GGTGCTTCGG GACTACCTGC  
5451 AAGGGAAGCT GATAGTCAGC ACCCAGGCAG AGGCTCTACT TGCCAGCTT  
5501 GCTGCCTTCC AACACTTCGA CAAAACCGGA ACTTCTAGTC CTCCATCAGA  
5551 GCAAGAGCTG CTGTCTTATA TTCCCAAGCC ACTGCAATGG CAGGTGAACA  
5601 CAGCCAACAT AAAGAGCTTG GTGACCCAGG AGCTGAGGCA GATGCAAGGG  
5651 TACAGCAAGC AGAGAGCACA GATTGGCTTT ATAGAGAGCA CAGCGCAGCT  
5701 GCCCTCTTT GGCTACACTG TGTACGTAGT GCTGAGAGTG AGTAAGCTGG  
5751 CCCTCCCTGG ACCAGGCCTC CTGGGGCTGA ACCGTACGCA CCTGGTCTCT

FIG. 2E.

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5801 ATGGACCCCA GCTCTCAGGA ACTCTGCTGC TCTGTCATGC TAAAAGACCT  
5851 GAAGCAGTTC CACCTGCTGA GCCCACTGCA GGAGGACGGG CCCCTTGGCC  
5901 TAGAACTCAA CTATGGCTCT GTTGACAACC CCCAGACCAT CTGGTTGGAG  
5951 TTGCCACAGG CCCAGGAGCT GCAGCACACC ATCATCTTCC TGCTGGGCAG  
6001 CATGTCCACT CAGTGGCCAG GTCTCCTCTG AGGAGTGGAG ATAAGGCAGC  
6051 GGTCTCTCAC TGGGCAGTCT GCCTTAGTCC TGCTCTGAAT CCGCTGCACA  
6101 ACCCCCCACC CCACGTGGAG GCCAAAAGGC AAAGTTGTGT CACCTGGGAG  
6151 AATAGGCAGA CACATCCCCT CTGGGGTGGA CTGCAACAGG AGTTGGGGCA  
6201 TTTGCTGGCT AGCCCCAGGG AAAATGCCCA CCCAGCTCGA AAGCGGCACA  
6251 AGTAAAACAC CCAAGGAAAA AAAAAAAAAA AAAAAAAAAA AAA

**FIG. 2F.**



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1 CGCTGGGACT GTCACCTACC AGGTGCACAA GTTCATAAAC AGAAACAGGG  
51 GCCACCTGGA CCCCGCTGTG CTGGAGATGC TCAGGCAGAG CCAGCTGCAG  
101 GTGACCTAGC CTTCCCTTCA GCTCATGGGC AGCCTGTTC AAGAAGCAGA  
151 GCCCCAGGCT GGGACTGAGC AAAACAAACC CACATTGGCC TCTCGATTCC  
201 AGCAGACCCT GGGTGAAGTG CTAGCTCGGC TAGGCAGCAG GGGCCATGTC  
251 TACGTCATCC ACTGTCTCAA TCCCACCCCT GGAAAGATCC CAGGCCTCTT  
301 GGACGTGGGG CATGTGGCAG AGCAGCTGCG TCAGGCTGGC ATCCTGGAGA  
351 TCATAGGCAC CCGGAGTACC CACTTCCCCG TCGCAGTGTC CTTCGAAGTC  
401 TTTCTGGCAA GGTTCATGC CCTGGGGTCA GGGAGACAGA AAGCTGCCTC  
451 TGACCAGGAG AGGTGTGGTG CCATCCTCAG TGAAGTGCTG GGGGCAGAGT  
501 CACCGCTGTA TCATCTTGGA GTCACCCAGG TCCTGCTGCA GGAACAGGGC  
551 TGGCAGCAGC TAGAACAGCT GTGGGCTCAG CGGCGCTCAC AGGCCCTGCT  
601 CACTCTGCAC CGTGGCCTCC GAGCCTGTAT CACCCGGCAG CGCCTCCGTC  
651 TCCTGCCCGG GATGCAGGCT CGTGTGCGTG GGCTCCAGGC CAGGAAGCGA  
701 TATCTCCAGC GGAGGTCAGC TCTGGGACAG CTGAACACCA TTCTCTAGT  
751 GGCCCGGGCC CTGCTCCGGA GACGACAGAA GCTACGGTGT GCCCCTGGCC  
801 CGCACAGCGG GGAGCCCTGG GGGAAAGTGT CAAATATGGA CCTGGGTCGC  
851 TTAGAGATCC CCGCCAGCT GGCTACTCTG CTGGAGAGGG CGGAAGGCCA  
901 CCAGGCCTTG CTGACGGGGA GCATCACAGA GTCCCTGCCA CCTGAGGTCC  
951 CCGCCCGGCC CAGCCTGACT CTCCTCCAG ACATTGACCA GTTCCCTTC  
1001 TCCAGTTTTG TATCCACCAG CTTTCAGAAG CCATTCTGCG CTCGACCAGG  
1051 GCAGCCACTG GACGAGCCCC TGACGCGGTT AGATGGCGAG AACCTCAGC

FIG. 3A.

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1101 AGGCTCTGGA GATCAACAGG GTGATGTGTC GGCTCCTGGG GGAAGGATCT  
1151 CTGCAGTCCT GGCAAGAGCA GACCATGGGC ACGTTCCTCG TGCAGCAGGC  
1201 CCAGCGACGG CCGGGACTCC GAGATGAGCT CTTAGCCAG CTGGTGGCCC  
1251 AGCTGTGGCG CAACCCAGAT GAGCAACAGA ATCAGCGTGG CTGGGCCCTA  
1301 ATGGTGATCC TGCTCAGCTC CTTTGCTCCC ACACCTGCCC TGGAGAAGCC  
1351 ACTGCTCAA TTTGTATCTG ACCAGGCTCC CAGTGGCATG GCAGCCCTGT  
1401 GCCAGCACAA GCTGTTAGGT GCCCTGGAGC AGACACCCTG GGCTCCCATG  
1451 GCTTCGAGGT CCCACCCACC CACACAACCT GAGTGGAAAG CTGGTTTACG  
1501 TCGGGGCCCG ATGGCGCTGG ATGTGTTTAC ATTCAACGAG GAAAGCTACT  
1551 CCGCGGAAGT GGAATCCTGG ACCACGGGAG AGCAGTTTGC AGGGTGGATC  
1601 CTACAGAGCA GAGGCTTGA GCGCCCCCT CGTGGCTGGT CTGTGTCACT  
1651 GCATTCTGGG GATGCTTGGC GTGACTTGCC TGGCTGTGAC TTTGTGTGG  
1701 ACCTAATAGG CCAGACTGAG GACTTGGGAG ACCCAGCTGG TCCCCACAA  
1751 TACCCCATCA CTCCTCTTGG TTTAGCTGAG AGCATCCCTC CAGCCCCTGG  
1801 TGTCAGGCT CCTTCCCTGC CCCAGGACT CCCTCCAGGT CCAGCCCCAA  
1851 TACTGGCCAG CAGCCGCCCT CCGGGCGAGG CCAGTAAGCC TGAGAACCTG  
1901 GATGGTTTCG TGGACCACCT CTTTGAACCA GCGCTCGCTC CGGGTTTACG  
1951 TGATCTGGAA CAAGGCTGGG CCCTGAGCAG ACGCATGAAG GGAGGGGGCT  
2001 CTGTTGGGCC CACCCAGCAG GGCTACCCCA TGGTGTACCC AGGTATGGTG  
2051 CAGGCACCTA GCTACCAGCC AGCTATGATA CCCGCACCGA TGCCCCGTCT  
2101 GCCAGCCATG GCGCGAGTCC CAACCATGCC AGCCATGATG GTGCCACCCC  
2151 AGCCACAGCC TCTGGTGCCC AGTTTGGACT CAAGGCAGCT GGGCACTACG  
2201 CAGCAAAACT TCATCAACCA GCAGGCGATG ATTCTGGCGC AGCAGATGAC  
2251 CACCCAGGCC ATGAGCCTGT CCCTGGAGCA GCAGAATCAG AGACACCAGC

FIG. 3B.

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2301 ACCAAGCTCA GACCTCTGGG GCCACCTCCC AGCCTCCACC CTCAACCACT  
2351 GCTCCCAAGG CCAAGAAGCC TCCTGCCCCC CAAGAGAAGC CAGAGAGTAA  
2401 CCTAGAGCCT TCGGGTGTTC GCTTGAGAGA GGACACCCCC GAGGAAGCTG  
2451 AAAGCAAGCC TCAGCGCCCC AAGAGCTTCC AACAGAAACG GGACTATTTT  
2501 CAGAAGATGG GGCAAGATCC GATCAGAGTG AAGACGGTGA AACCTCCAGC  
2551 CAAGGTTCAG ATCCCCCAAG AGGAGATGGA GGAGACGGAG GAGGAGGAGG  
2601 ATGAGACCGC CGAGTTGTCC CCTCCTCCTC CCCCTCCCCC GGTGTGTAAG  
2651 AAGCCGCTGA AGGCAAGCAG GCCCAAAGCC GTAAAGGAAG ATGAGGCAGA  
2701 GCCCGCCAG GAGGAAGTAC CGACCCAGGG CGAGGATCCC CCGGTGCACA  
2751 GCTCCAACTC CGCACCTCAG CACCCCAAAC CCAGCAGGGT ACCCCCAGTG  
2801 CAGAGCTCCA ACTCCGCACC TCCACGCCCG CAACCCAGCA GGGAAATCCG  
2851 AAACATCATC CGAATGTACC AGAGCCGTCC AGGGCCTGTG GCTGTGCCCC  
2901 TACAACCCAC CAGGCCCATC AAAACTTTTC AGAAGAAAAA TGACCCTAAG  
2951 GATGAGGCTT TGGCTAAGTT AGGGATAAAT GGCCTCCACT TGCCCTATC  
3001 GACATCGCCT AACCAAGGGA AGAGCTCTCC ACCGGCTGTA GTTCCTCGAC  
3051 CTAAGGCTCG ACCTCGTCTT GAGCCTTCCC TATCCATCCA GGAAAAGCAG  
3101 GGACCCCTTC GGGACTTGTT TGGCCCATGT AGTCCAAACC CACCTACAGC  
3151 TCCAGCACCC CCGCCTCCAC CAGCACTCCC ACCGCCTCTG TCTGGGGAGC  
3201 CCAAGACCCC TTCAGTGGAG TCTCATGCCT TGACAGAGCC CATGGAGGAC  
3251 AAGAACATCT CCACAAAGCT CCTTGTGCCC TCTGGAAGTG TGTGCTTCTC  
3301 CTATGCCAAT GCACCTGGA AGTTGTTCTT ACGCAAGGAG GTGTTCTACC  
3351 CCCGGGAGAA CTTAGTCAT CCATACTGCC TCAGTCTCCT CTGCCAGCAG  
3401 ATCCTGCGGG ACACCTTCAC AGAGTCTGC ACCCGGATCT CACAGGATGA

FIG. 3C.

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3451 GCGGCACAAA ATGAAAGGCC TTCTGGGAGA CTTGGAGGTG AGTCTGGAGA  
3501 CCCTTGACAT TGTGAAGAC AGCATCAAAA AACGCATCGT GGTGCTGCT  
3551 CGGGACAACCT GGGCCAATTA CTTCTCCCGC ATCTTCCAG TCTCGGGTGA  
3601 GAGTGGCAGC GATGTACAGC TGCTGGGTGT GTCTACCCGG GGAAGTGGCG  
3651 TGCTGAAGGT GACCCAAAGC CCGAGCTTCC ACCTGGACCA GCTGAAGACA  
3701 CTCTGTTCTT ACAGCTATGC TGAAGTCTTG ACCGTGCACT GCAGGGGCG  
3751 ATCCACCCTG GAGCTGTCTT TGAAGAATGA GCAGCTGATA CTGCACACAG  
3801 CCTGGGCGAG GGCCATCAAG GCCATGGTGG ATCTATTTCT GAGTGAAGTC  
3851 AGGAAGGACT CCGGCTATGT CATCGCCCTG CGCAGCTACA TCACCGATGA  
3901 CAATAGCCTC CTCAGTTTCC ACCGTGGGGA CCTCATTAGG TTACTGCCAG  
3951 TGACCGCTCT GGAACCAGGC TGGCAGTTCG GTTCTGCCGG GGGCCGCTCC  
4001 GGACTCTTTC CCGATGACGT GGTGCAGCCA GCTGCTGCCC CCGACCTCTC  
4051 CTTTTCCTTG GGAAAGAGAA ACAGCTGGCA ACGCAAGAGT AAGCTGGGGC  
4101 CAGCTCAGGA GGTGAGGAAG ACAGAAGAGG TGAAGTGATA CAGGCCTAAC  
4151 TTGGAGACTG AGAAGGAAAG AGCAGGGTTG CTTCGGGTGT TGTCCACTTC  
4201 CTGTCCTGGT GGCCAGGGCT CAATGTGTTC CTGTCCTTTA CCATCTCCTG  
4251 ACTTTTGGCC ATTGTGAGA CTGTAAGTCA CACCCTCTAA CTCTGGTACT  
4301 TAGTTCAGTG TCTCCATAGA GGATGCTTAA TAAATAACCT TGGTTTTCCT  
4351 GGAAAAAAAA AAAAAAAAAA AAAAA

FIG. 3D.

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MYQSRPGVPVPVQPSRPPKAFLRKIDPKDEALAKLINGAHSSPPMLSPSPGKGPPEAVAPRPKA  
PLQLGPPSSSIKEKQGFLLDLFGQKLPFAHTPPPPAPPPLPLPEDEPGLSAERRCLTQPVEDQGVST  
QLLAPSGSVCFSYTGTPWKLFLRKEVFYPRENFSHPYLRLLCEQILRDTFSESCIRISQNERKRM  
KDLLGGLVDLDSLTTEDSVKKRIVVAARDNWNANYFSRFFVSGESGSDVQLLAVSHRGLRLKKV  
TOGPGLRPDQLKILCSYFRAEVLGVECRGGSTLELSIKSEQILVLTARARAIEALVELFINELKKD  
SGYVIALRSYITNCSLLSFHRGDLIKLLPVATLEPGWQFGSAGRSGLFPADIVQFAAAPDFSF  
KEQRSGWHHKGQLSNGEPGLARWDRASEVRKMGEGQAEARPA

FIG. 4.

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CGGCAGCAGCAGGCTCGGGCTCCGAGGCTGCGTCCCAGGCTCACCTCAGCCGTACCTCCAAG  
CCAGGAAGCCCCACACCCCGGAGAAGCCACAGCGTGACCTGGGATCAGAGGGTGGCTGCCTG  
AGGGAGACCTCCGAGGAGGCTGAAGACAGGCCCTATCAGCCCAAGAGCTTCCAGCAGAAACGGAAC  
TATTTCCAGAGGATGGGGCAGCCACAGATCACAGTGAGGACGATGAAGCCCCGGCCAAGGTCCAC  
ATCCCCCAGGGGGAAGCGCAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGCAGGAGGAGCAA  
GAAGTGAAACAAGAGCAGCGCGTCCCTCCTCCTCCCCCATCGTGAAGAAGCCATTGAAGCAA  
GGTGGGGCCAAAGCTCCAAAAGAGGCTGAGGCTGAGCCAGCCAAGGAGACAGCGGCCAAGGGCCAT  
GGCCAAGGGCCAGCCCAAGGCAGGGGGACTGTGGTGCAGTCAAGCTCCAAGCCCAAGCGGCCAC  
AACCCAGCAGGGAATTTGGCAACATCATCCGCATGTACCAGAGCCGCCGGGCCCGTGCCTGTGC  
CCGTGCAGCCATCCAGGCCTCCAAAGCTTTCTGAGGAAAATCGACCCCAAGGACGAGGCTCTGG  
CCAAGCTGGGTATCAACGCTGCCACTCGTCCCGCCGATGCTGTCCCCCAGCCAGGAAAGGGCC  
CCCCGCGAGCTGTGGCTCTCGACCCCAAGGCCCGCTACAGCTTGGGCCCTCTAGCTCCATCAAGG  
AAAAGCAGGGGGCCCTTCTGGACCTGTTGGCCAGAAGCTGCCTATTGCCACACACCCCCACCTC  
CACCAGCGCCACCACTGCCTCTGCCGAGGACCCAGGGACCTTTACAGCAGAGCGTCTGTGCTTGA  
CACAGCCCGTGGAGGACCAGGGGGTCTCCACCAGCTACTCGCGCCTCTGGCAGCGTGTGCTTCT  
CCTACACCGGCACGCCCTGGAAGTTGTTCTACGCAAGGAGGTGTTCTACCCACGGGAGAACTTCA  
GCCATCCTACTACCTGAGGCTCCTCTGTGAGCAGATCCTACGGGACACCTTCTCCGAGTCTCTGA  
TCCGGATTTCACAGAATGAGCGCGGAAAATGAAAGACCTGCTGGGAGGCTTGGAGGTGGACCTGG  
ATTCTCTACCAACCACCGAAGACAGCGTCAAGAAGCGCATCGTGGTGGCCGCTCGGGACAACCTGGG  
CCAATTACTTCTCCCGCTTCTTCTCTGTCTCGGGCGAGAGTGGCAGCGAGTGCAGCTGTTAGCCG  
TGTCACACCGTGGGCTGCGACTGCTCAAGGTGACCCAAGGCCCGGCTCCGCCCCGACCACTGA  
AGATTCTCTGCTCATACAGCTTTGCGGAGGTGCTGGGTGTGGAGTGCCGGGGCGGCTCCACCTGG  
AGCTGTCACTGAAGAGCGAGCAGCTGGTGTGCTGCACACAGCCCGGCAAGGGCCATCGAAGGCGCTGG  
TTGAGCTATTCTGAATGAGCTTAAGAAGGACTCCGGCTATGTATCGCCCTGCGCAGCTACATCA  
CTGACAACCTGCAGCCTCCTCAGCTTCCACCGTGGGGACCTCATCAAGCTGCTGCCGTGGCCACCC  
TGGAGCCAGGCTGGCAGTTTGGCTCTGCCGGGGCCGTTCCGGACTCTTCTGCCGACATAGTGC  
AGCCGGCTGCCGCTCCGACTTTTCTCTCTCAAGGAGCAGAGGAGTGGCTGGCACAAGGGTCAGC  
TGTCACACGGGGAACAGGGCTGGCTCGGTGGGACAGGGCCTCAGAGGTGAGGAAGATGGGAGAGG  
GACAAGCAGAGGCAAGGCCTGCCTGAGACTGAGGAAGGAAAGGGGTTTGACCACTCCCAGGCTGC  
CATGCGGTGGGACCACCTGCTGTCCGTCTCCTGTGGCTGCCCTCTGCCCGCTCCTGATGGCTCG  
CCTGTCTCTCCAGCAAGACTGTGCACTCCTTGACGGCAGGGGCTGGGCTGGATGCTGCTCTTGTG

FIG. 5A.

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TCCCACGTGGTACTTAGTTCAAGGCTGCCCCAGCAGATGCTTAATAAACAGCTCTTCACTTTTCCTG  
GCTTCTGGTCTTGCTCCTTTGGTGCTGGCTGGGGAGGGATGGGGCTGGGGCAGGACCCCTGGGAC  
AGGGCACTGGACACTCAGGTGGCACCAGGTTTCTTGATCCCAGCGCCCTGCCACCCTTGGAGC  
CAGGCACACAGTGACGACTCGGAGGCCACAGCCTGTCTCTGTGGCCTATGCCTTTCTGCCGAC  
TCCCACAGCTACACCATGCAGGAATTCGCCCGCGTTACTTCCGAGGTCCCAGGCCTTGCTGGGC  
CAGACTGATGGAGGTGCCGAGGAAAGGACACGGACAGCCTGGTGCAGTACACCAAGGCTCCCATC  
CAGGAGTCGCTCCTCAGCCTCAGTGATGATGTGAGCAAGCTGGCTGTAGCCAGCTTCTGGCCCCCT  
GATGCGGTTTATGGGTGACCACTCCAAGCCCCGGGGCAAGGATGAGATGGATCTGCTCTATGAACT  
GCTGAAGCTGTGCCAGCAGGAGAAGCTGAGGGATGAGATTTACTGCCAGGTTATCAAGCAGGTCAC  
AGGACACCCCCCGCCGGAACACTGCACCTCGAGGCTGGAGCTTCTCAGCCTTCTCACAGGCTTCTT  
CCCCCGTCGACAGGCTGATGCCCTACCTGACCAAGTTTCTGCAGGATTAGGCCCCAGCCAAGA  
GCTGGCCCGGAGCAGCCAGGAGCACCTCCAGCGCACAGTCAAAATATGGGGGGCGCCGGCGGATGCC  
CCCCACGGGTGAAATGAAGGCTTTCTTCTGAAAGGACAAAGCGATTTCGCTGCTTCTTATTCACTGCC  
GGGGGTGTGGATTATAGGACGAATATCCAGACTTTCACAGTAGCAGCAGAAGTGCAGGAGGAGCT  
GTGCCCGCAAAATGGGTATCACGGAGCCTCAGGAAGTGCAGGAATTTCGCCCTTCTCTCATCAAAGA  
GAAGAGCCAGCTGGTGCGGCCCTGCAGCCCGCCGAATACCTCAACAGCGTGGTAGTGGACCAGGA  
CGTGAGCCTGCACAGCCGGCGGCTCCACTGGGAGACCCCACTGCACCTTCGATAACTCCACCTACAT  
CAGCACCCACTACAGCCAGGTGCTGTGGGACTACCTTCAGGGGAAGCTGCCAGTCAGCGCCAAGGC  
AGACGCGCAGCTCGCCAGGCTGGCCGCCCTGCAGCACCTCAGCAAGGCCAACAGGAATACCCCTC  
AGGGCAGGACCTGCTAGCTTACGTGCCAAAGCAGCTGCAACGGCAGGTGAACACGGCCTCCATCAA  
GAACCTGATGGGTGTCAGGAGCTGAGACGGCTGGAAGGACACAGCCCCAGGAAGCACAGATCAGCTT  
CATTGAGGCCATGAGCCAGCTGCCCTCTTCGGCTACACCGTCTATGGGGTGCTGCGAGTGAGCAT  
GCAGGCCCTGTCCGACCCACTCTCTGGGGCTCAACCGCCAGCATCTATCCTCATGGACCCAG  
CTCCAGAGCCTGTATGCGGCATTGCCCTGAAGAGCCTGCAGCGGCTCCACCTGCTAAGCCCTCT  
GGAGGAGAAGGGGCCCCCTGGCCTGGAAGTCAACTATGGCTCAGCTGACAACCCCCAGACCCTCTG  
GTTTGAGCTGCCACAGGCCAGGAGCTGCTATACACCACTGTCTTCTGATAGACAGCAGTGCCCTC  
TTGCACTGAGTGGCCAGCATCAACTGAGAGGAGTGCAGGCCGGGAGAGAAGAGGATGAGGCCTC  
CCCCGGCCCAAGTCTCACCCACATGGTCTGCCTTGGATGCTATCAGATCACTGTTCTAGAACCTGC  
CTCAGCACAGCCAGCCGGCCACATGCAGGCCATGAGGCAGGGGCTGTATACGTCAACAGCAG  
GCAAGAAAACAGCCAGACCCTCTCCAGGACGGCTGGGGCCAAAGCGGGCTGCAGGAACCTCGGCT  
GGGGCAGCTGAGGTTGCCAGTCTGAGGGAGATGCCACCCGACCCAGGCTCCGCCCCAGGCCCA

FIG. 5B.

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CATTAGCACAAGCCCAGGCATGGGAGAAACAGCTGCTGAGGAAATAAACTCCCTAAAAAAAAAAAA  
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***FIG. 5C.***

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MYQSRPGPVVPVQPSRPPKAFLRKIDPKDEALAKLINGAHSSPPMLSPSPGKGPPPAVAPRPKA  
PLQLGPSSSIKEKQGPLLDLFGQKLP IAHT P P P P P A P P L P L P E D P G T L S A E R R C L T Q P V E D Q G V S T  
QLLAPSGSVCFSTYGT PWKLFLRKEVFYPRENFSPHYLRLLCEQILROTFSESCIRISQNERMKM  
KOLLGGLVDLDSLTTEDSVKKRIVVAARDNWANYFSRFFPVSGESGSDVQLLAVSHRGLRLKKV  
TQGPGLRPDQLKILCSYSFAEVLGVCECRGGSTLELSLKSEQLVLHTARARAIEALVELFLNELKKD  
SGYVIALRSYITDNCSLLSFHRGDLIKLLPVATLEPGWQFGSAGGRSGLFPADIVQPAAPDFESFS  
KEQRSGWHKGQLSNGEPGLARWDRASERPAHPWSQAHSDDEATSLSSVAYAFLPDSHSYTMQEFA  
RRYFRRSQALLGQTDGGAAGKOTDSLVOYTKAPIQESLLSLSDDVSKLAVASFLALMRFMGDQSKP  
RGKDEMDLLYELLKLCQKEKLDEIYCQVIKQVTGHPREHCTRGWSFLSLLTGFFPPSTRLMPYL  
TKFLQDSGSPQELARSSQEHLQRTVKYGGRRMPPPGEMKAFLKGQAIRLLLIHLPGGVYRTNIQ  
TFTVAEVEQELCRQMGITPEQVEQEFALFLIKEKSQLVRLQPAEYLNVSVVVDQDVSLSHSGGSTG  
RPHCTSITPPTSAPTTARCCGTTFRGSCQSAPRQTRSSPGWPPCSTARSPTGIPPQGRTC

**FIG. 6.**

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CGGCAGCAGCAGGCTCGGGCCTCCGAGGCTGCGTCCCAGGCTCACCCTCAGCCGTCACCTCCAAG  
CCCAGGAAGCCCCCACACCCCGGAGAAGCCACAGCGTGACCTGGGATCAGAGGGTGGCTGCCTG  
AGGGAGACCTCCGAGGAGCTGAAGACAGGCCCTATCAGCCCAAGAGCTTCCAGCAGAAACGGAAC  
TATTTCCAGAGGATGGGCGAGCCACAGATCACAGTGAGGACGATGAAGCCCCGGCCAAAGGTCCAC  
ATCCCCCAGGGGGAAGCGCAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGCAGGAGGAGCAA  
GAAGTGGAAACAAGAGCAGCGCGCTCCCTCCTCCTCCCCCATCGTGAAGAAGCCATTGAAGCAA  
GGTGGGGCCAAAGCTCCAAAAGAGGCTGAGGCTGAGCCAGCCAAGGAGACAGCGGCCAAGGGCCAT  
GGCCAAGGGCCAGCCCAAGGCAGGGGACTGTGGTGCGCAGTCAGACTCCAAGCCCAAGCGGCCAC  
AACCAGCAGGGAAATTGGCAACATCATCCGATGTACAGAGCCGCCCGGGCCCGTGCCTGTGC  
CCGTGCAGCCATCCAGGCCTCCCAAAGCTTTCCTGAGGAAAATCGACCCCAAGGACGAGGCTCTGG  
CCAAGCTGGGTATCAACGGTGCCCACTCGTCCCCGCCGATGTGTCCCCCAGCCAGGAAAGGGCC  
CCCCGCCAGCTGTGGCTCCTCGACCCAAGGCCCGCTACAGCTTGGGCCCTCTAGCTCCATCAAGG  
AAAAGCAGGGGGCCCCCTTCGACCTGTTTGGCCAGAAGCTGCCTATTGCCACACACCCCCACCTC  
CACCAGCGCCACCACTGCCTCTGCCGAGGACCCAGGGACCCCTTTCAGCAGAGCGCTCGTTGCTTGA  
CACAGCCCGTGGAGGACCGGGGCTCTCCACCCAGCTACTCGCGCCCTCTGGCAGCGTGTGCTTCT  
CCTACACCGGCAGCGCCCTGGAAGTTGTTCTCTACGCAAGGAGGTGTTCTACCCACGGGAGAAGTCA  
GCCATCCCTACTACCTGAGGCTCCTCTGTGAGCAGATCCTACGGGACACCTTCTCCGAGTCTGTGA  
TCCGGATTTCCAGAATGAGCGGCGGAAAATGAAAGACCTGCTGGGAGGCTTGGAGGTGGACCTGG  
ATTCTCTCACCACCACCGAAGACAGCGTCAAGAAGCGCATCGTGGTGGCCGCTCGGGACAAGTGGG  
CCAATTACTTCTCCCGCTTCTTCTGTCTCGGGCAGAGTGGCAGCGACGTGCAGCTGTGAGCGG  
TGTCCACCGTGGGCTGCGACTGCTCAAGGTGACCCCAAGGCCCGGCCTCCGCCCGACCAAGTGA  
AGATTCTCTGCTCATAAGCTTTGCGGAGGTGCTGGGTGTGGAGTGCCGGGGCGGCTCCACCCCTGG  
AGCTGTCACTGAAGAGCGAGCAGCTGGTGTGCACACAGCCCGGGCAAGGGCCATCGAGGCGCTGG  
TTGAGCTATTCTGAATGAGCTTAAAGAGGACTCCGGCTATGTCATCGCCCTGCGCAGCTACATCA  
CTGACAACTGCAGCCTCCTCAGCTTCCACCGTGGGGACCTCATCAAGCTGCTGCCGTTGGCCACCC  
TGGAGCCAGGCTGGCAGTTTGGCTCTGCCGGGGCCGTTCCGGACTCTTTCTGCCGACATAGTGC  
AGCCGGCTGCCGCTCCCGACTTTTCTTCTCCAAGGAGCAGAGGAGTGGCTGGCACAAGGGTCAGC  
TGTCCAACGGGGAACAGGGCTGGCTCGGTGGGACAGGGCCCTCAGAGCGCCCTGCCACCCCTTGGGA  
GCCAGGCACACAGTGACGACTCGGAGGCCACAGCCTGTCTCTGTGGCCTATGCCTTTCTGCCCG  
ACTCCCACAGCTACACCATGCAGGAATTGCCCGGGCTTACTTCCGAGGTCCCAGGCCTGTGCTGG  
GCCGAGCTGATGGAGGTGCCCGAGGAAAGGACACGGACAGCCTGGTGAGTACACCAAGGCTCCCA

FIG. 7A.

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TCCAGGAGTCGCTCCTCAGCCTCAGTGATGATGTGAGCAAGCTGGCTGTAGCCAGCTTCTTGCCCC  
TGATGCGGTTTATGGGTGACCAAGTCCAAGCCCGGGGCAAGGATGAGATGGATCTGCTCTATGAAC  
TGCTGAAGCTGTGCCAGCAGGAGAAGCTGAGGGATGAGATTTACTGCCAGGTTATCAAGCAGGTCA  
CAGGACACCCCCGGCCGGAACACTGCACTCGAGGCTGGAGCTTCTCAGCCTTCTCACAGGCTTCT  
TCCCCCGTTCGACCAGGCTGATGCCCTACCTGACCAAGTTTCTGCAGGATTAGGCCCCAGCCAAAG  
AGCTGGCCCGGAGCAGCCAGGAGCACCTCCAGCGCACAGTCAAATATGGGGGCGCCGGCGGATGC  
CCCCACCGGGTGAAATGAAGGCTTCTCTGAAAGGACAAGCGATTGCGCTGCTTCTATTACCTGC  
CGGGGGGTGTGGATTATAGGACGAATATCCAGACTTTCACAGTAGCAGCAGAAGTGCAGGAGGAGC  
TGTGCCGGCAAATGGGTATCAGGAGCCTCAGGAAGTGCAGGAATTGCGCCTCTTCTCATCAAAG  
AGAAGAGCCAGCTGGTGCAGCCCTGCAGCCCGCCGAATACCTCAACAGCGTGGTAGTGGACCAGG  
ACGTGAGCCTGCACAGCGCGGCTCCACTGGGAGACCCCACTGCACTTCGATAACTCCACCTACAT  
CAGCACCCACTACAGCCAGGTGCTGTGGGACTACCTTCAGGGGAAGCTGCCAGTCAGCGCCAAGGC  
AGACGCGCAGCTGCGCAGGCTGGCCGCCCTGCAGCACCTCAGCAAGGCCAACAGGAATACCCCTC  
AGGGCAGGACCTGCTAGCTTAGTGCCAAAGCAGCTGCAACGGCAGGTGAACACGGCCTCCATCAA  
GAACCTGATGGTTCAGGAGCTGAGACGGCTGGAAGGACACAGCCCCAGGAAGCACAGATCAGCTT  
CATTGAGGCCATGAGCCAGCTGCCCTCTTCGGCTACACCGCTCTATGGGGTCTGCGAGTGAGCAT  
GCAGGCCCTGTCCGGACCCACTTCTCTGGGGCTCAACCGCCAGCATCTCATCTCATGGACCCAG  
CTCCCAGAGCCTGTACTGCCGATTGCCCTGAAGAGCCTGCAGCGGCTCCACCTGCTAAGCCCTCT  
GGAGGAGAAGGGGCCCCCTGGCCTGGAAGTCAACTATGGCTCAGCTGACAACCCCCAGACCATCTG  
GTTTGAGCTGCCACAGGCCAGGAGCTGCTATACACCACTGTCTTCTGATAGACAGCAGTGCCCTC  
TTGCACTGAGTGGCCAGCATCAACTGAGAGGAGTGCAAGCGCGGGGAGAGAAGAGGATGAGGCCCTC  
CCCCGGCCCAAGTCTCACCCACATGGTCTGCCTTGGATGCTATCAGATCACTGTTCTAGAACCTGC  
CTCAGCACAGCCCCAGCCGCCCCACATGCAGGCCATGAGGCAGGGCTGCTACGTCACCGTCAACGAG  
GCAAAGAAAACAGCCAGACCTCTCCAGGACGGCCTGGGGCCAAAGCGGGCTGCAGGAAGTCCGGCT  
GGGGCACCTGAGGTTGCCAGTCTGAGGGAGATGCCACCCGACCCAGGCTCCGCCAGGCCCCCA  
CATTAGCACAAAGCCAGGCATGGGAGAAACAGCTGCTGAGGAAATAAACTCCCTAAAAA  
AAAAAAAAAAAAAAAAAAAA

FIG. 7B.

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mMRP: 914 MYOSRPGVAVQPTRIKTFQKNKDEAKLKGINGVHL-PLSTSPNQKSKSPAV 972  
 MYOSRGPV VPQV-PP K F +K DKDEALAKLKGING H P SP+ GK PPV  
 hMRP: 1 MYOSRGPVVPVQSPKPKFLRKIDPKDEALAKLKGINGAHSPMLSPSGKGPVAV 60

mMRP: 973 VPRPKARPLEPSISIOEQQLRDLFGFSPNPPTAPAPPPPPALPPPLSGEKPSPVE 1032  
 PRPKA +L PS SI+EQQL DLFG P A PRPKA P PL +P T S E  
 hMRP: 61 APRPKAPLQPLGSSSIKEKQGLDLDFGQ---KLPIAHTPPPPPPALPEDEGTLSE 117

mMRP: 1033 SHALTEPMEDKNISTKLLVPSGVCFSYANAPWKLFLKEVYPRNESHFYCLSLCCQ 1092  
 LT+P+ED+ +ST+LL PSGVCFSY PWKLFLKEVYPRNESHFY L LIC+Q  
 hMRP: 118 RRCUTQVEQQGVSTQLLAPSGVCFSTYGTGFWKLFLKEVYPRNESHFYRLICQ 177

mMRP: 1093 ILRDTFESCTRISQDERHKMKGLLDGLESVLETLDIVEDSKKRIIVVAARONWANYFSR 1152  
 ILRDTF+ESC RISO+ER KMK ILG LEV L++L EDS+KKRIIVVAARONWANYFSR  
 hMRP: 178 ILRDTFESCTRISQNERAKMKDGLGLEDVLDLSITTTEDSVKRIIVVAARONWANYFSR 237

mMRP: 1153 IFPVSGSGSDVQLLVSHRGLRLIKVTPSQSFHLDQKLKLCYSYAEVLTVCGRSTL 1212  
 IFPVSGSGSDVQLL VSHRGLRLIKVTP DQK LCYSY+AEVL V+CRG STL  
 hMRP: 238 IFPVSGSGSDVQLLVSHRGLRLIKVTPQGLRPPDQKLKLCYSYAEVLTVCGRGSTL 297

mMRP: 1213 ELSLKNEOLILHTAWARAIRKAWDLFLSELKRDGVIYALRSYITDONSLLSFHRGDLIR 1272  
 ELSLK+EOI+LHTA ARAI+A+V+LFL+EL+KDSGVIYALRSYITD+ SLLSFHRGDLI+  
 hMRP: 298 ELSLKSEQLVHTARARAIEALVELFELNELKDSGVIYALRSYITDONSLLSFHRGDLIK 357

mMRP: 1273 LLPVTLPEPGWQFGSAGGRGLFPDDVQVPAAPDLSESLGKSNWQR 1320  
 LLPV LPEGWQFGSAGGRGLFP D+VQPAAPD SFS +R+ W +  
 hMRP: 358 LLPVTLPEPGWQFGSAGGRGLFPADIVQPAAPDFESFESKQSRGWHK 405

Identities = 302/408 (74%), Positives = 334/408 (81%), Gaps = 4/408 (0%)

FIG. 8.

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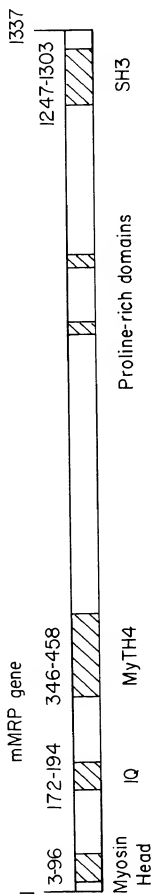


FIG. 9.

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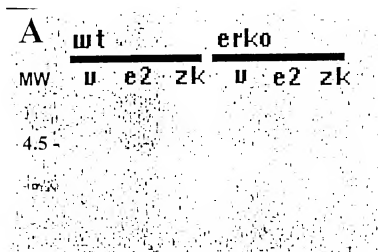
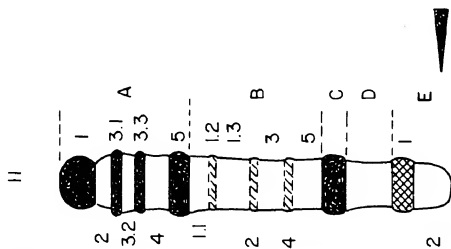


FIG. 10.

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FIG. 11.



**FIG. 12.**



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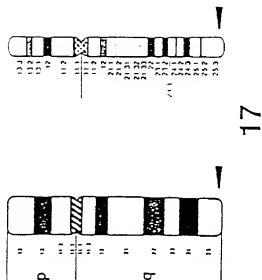


FIG. 13.